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Assessment of Conversion Methods to Acquire 1-Minute Integration time Rain Intensity Statistic (Conference Paper)

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Abstract

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This paper presents some preliminary findings of assessments carried out pertaining to the applicability of rain intensity conversion methods. Five conversion methods were identified in this study namely the ITU-R, Segal, Burgeuno, Chebil-Rahman and Khairolanuar et al. 1 year of rain intensity data were acquired from the Malaysian Meteorological Department (MMD) and utilized in the investigation. The research methodology involves productions of annual rain intensity cumulative distributions at 1-minute integration time using mentioned conversion methods. Predicted values established by ITU-R are used as benchmark. The values are then compared with values acquired using other conversion methods; in order to validate the applicability and effectiveness of each method. Based on the evaluation, it can be observed that the Khairolanuar et al. method seems to be a befitting conversion method and capable of generating values with smallest percentage difference. © Springer International Publishing Switzerland 2015.

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